IDEM Guidance
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Enclosure D1 (Formerly referred to as Attachment D1)

I. Methane Monitoring Program for Municipal Solid Waste Landfill - Outline

In accordance with the Solid Waste Rule 329 IAC 10-20-17 municipal solid waste landfills must prepare and submit a methane monitoring program. At a minimum, the program must include the following:

a. A landfill topographic plot plan with solid waste boundaries clearly delineated. This map shall also depict any enclosed structures located on-site or within three hundred (300) feet of the solid waste boundary of the facility. The plan shall be accompanied by a narrative evaluating the current condition of the facility, addressing in particular any presently existing gas venting spots and leachate seeps.

b. In the event that the original evaluation of the site indicates that methane gas concentration levels are exceeding the regulatory limits as set by 329 IAC 10-20-17, then a gas venting system or a gas extraction system must be proposed for the facility. For more information on landfill gas venting systems, refer to Part II entitled, "Methane Gas Venting System".

c. The procedures for measuring methane gas concentration and the frequency of gas monitoring. Methane monitoring should be done in all enclosed structures located at or within one hundred (100) feet of the solid waste boundary and around the perimeter of the facility. Particular consideration should be given to possible methane gas passageways such as utility lines, pipes, and sand and/or gravel seams located within one hundred (100) feet of the solid waste boundary of the facility.

   The testing intervals should be based on proximity of buildings located in the vicinity of the landfill and, at a minimum, gas concentration should be measured at five (5) different locations around the solid waste boundary boundaries. The following spacing of the measuring points is recommended:

1. Every 100 feet if buildings are located at or within 600 feet of solid waste boundaries.

2. Every 300 feet if buildings are located between 600 and 1,200 feet.

3. Every 1,000 feet if the distance between the fill boundary and buildings is greater than 1,200 feet.

The monitoring should be implemented on a quarterly basis unless the site location and the initial methane gas concentration levels dictate a different or more frequent monitor- ing schedule. Testing locations should be depicted on a landfill topographic plot plan.

d. A description of the methods and equipment used during the measuring of the concentration of methane at the landfill site. The procedures to ensure employee and public safety while implementing a gas monitoring program at the site.

e. A contingency plan in the event that methane gas concentration levels at the site exceed the regulatory limits as set by 329 IAC 10-20-17.